

ABSTRACT OF THE DISCLOSURE

5 A processor core for realizing efficient operation
processing by connecting an extended arithmetic unit to its
exterior and a processor incorporating such a processing core
are provided. The processor includes the processor core, a
data memory accessed by the processor core, and the extended
arithmetic unit connected to the exterior of the processor
core for processing a particular instruction. The extended
10 arithmetic unit executes an arithmetic operation by using
arithmetic operation data retained in a register file in the
processor core, and directly outputs an arithmetic operation
result to the processor core. Then, the processor core saves
the result of the arithmetic operation executed by the extended
15 arithmetic unit and inputted therefrom in the register file
in the processor core.

0966456-092100